Appendix 2: Descriptive Data for Reconnaissance Sites

Site name: Chief Old Joseph Monument

County and state: Wallowa County, Oregon

Location: T3S, R45E, Section 5: N 1/4 of NW 1/4

Elevation: 4,400-4,420'

Ownership: Federal

Communities present: Artemisia ludoviciana/Festuca idahoensis bottomland, Festuca idahoensis-Koeleria cristata grassland, Festuca idahoensis/Rosa sp. moist soil type

Rare or endemic taxa: Silene spaldingii

Exotic species concerns: Poa pratensis, annual bromes, Potentilla recta

Records: Oregon Natural Heritage Program PDCAR0U1S0\*001

Additional sources of information. Site visit Jul. 14, 1998

Comments: Species observed on Jul. 14, 1998: Shrubs: Artemisia ludoviciana, Berberis sp., Eriogonum heracleoides, Ribes sp., Rosa nutkana, Symphoricarpos albus; Perennial graminoids: Agropyron smithii, Bromus carinatus, Elymus cinereus, Festuca idahoensis, Koeleria cristata, Poa pratensis, Perennial forbs: Achillea millefolium, Antennaria sp., Arnica soraria, Cynoglossum officinale, Erigeron sp., Fragaria virginiana, Geranium viscosissimum, Helianthella uniflora, Hieracium albertinum, Lithospermum ruderale, Potentilla gracilis, P. recta, Solidago missouriensis; Annuals and biennials: Bromus mollis, Collomia sp., Galium aparine, Tragopogon dubius.

Site ranking: Meadow steppe communities in fair condition.

Site name: Kamiak Butte County Park And agent in regard in the state of the state o

County and state: Whitman Co., Washington 10 seems and seems and seems and seems and seems and seems are seems as the seems and seems are seems as the seems are seen as the seems are seems as the seems are seen as the seems are seems as the seems are seen as the seems are seems as the seems are seems are seen as the s

Location: T16N, R45E, Section 20: NE 1/4 of NE 1/4; Section 21: NW 1/4 of NW 1/4

Elevation: 3,100-3,480'

Ownership: County

Communities present: Agropyron spicatum-Festuca idahoensis, Festuca idahoensis. Symphoricarpos albus, Agropyron spicatum-Poa secunda lithosol

Rare or endemic taxa: 1 individual of Astragalus arrectus reported by Fiely (1979)

Exotic species concerns: See Table 11A and Table 12.

Data records: Washington Natural Heritage Program CTEJ.BBA00\*019

Additional sources of information: Mullen 1933; Fiely 1979; site visits Jul. 28, Aug. 25, 1998; Jim Roberts, Jim Croft personal communications

Comments: See Table 11A for reconnaissance plot data and Table 12 for a comparison of non-native species observed at Kamiak Butte in 1933, 1979, and 1998.

Site ranking: Some stands are very disturbed, while others are in good condition. On the basis of the large size of the protected area and the fact that there are some stands with relatively little invasion of exotic species, the site was rated as fair to good.

Site name: Mary Minerva McCroskey Memorial State Park

County and state: Benewah County, Idaho

Location: T44N, R5W, Section 30: SW 1/4 of NW 1/4

Elevation: 3,500-3,600'

Ownership: State

Communities present: Festuca idahoensis/Symphoricarpos albus, Festuca scabrella-

Festuca idahoensis

Rare or endemic taxa: None reported

Exotic species concerns: Annual bromes, Ventenata dubia, Vicia villosa

Records: Idaho Conservation Data Center CEGL001628\*002

Additional sources of information. Lichthardt and Moseley 1997, Site visit Jul. 31, 1998

Comments: See Table 11B for reconnaissance plot data.

Site ranking: Some stands are very disturbed, while others are in good condition. On the basis of the large size of the protected area and the fact that there are some stands with relatively little invasion of exotic species, this reconnaissance site was rated as fair to good.

Site name: Wawawai Canyon

Date visited: Aug. 3, 1998

County and state: Whitman County, Washington

Location: T13N, R43E, Section 12: NW 1/4 of NW 1/4; Section 1: SW 1/4 of SW 1/4

Elevation: 900-1,300'

Ownership: Private

Communities present: Agropyron spicatum-Poa secunda (very disturbed), Rosa thickets, riparian deciduous trees and shrubs

Rare or endemic taxa. Astragalus arrectus historic record (1941), not found in 1998; Astragalus riparius recorded in 1980, not found in 1998

Exotic species concerns: Many, including annual bromes, Anthriscus caucalis, Bryonia alba, Centaurea solstitialis, Convolvulus arvensis, Cynoglossum officinale, Elymus caput-medusae, Hypericum perforatum, Lactuca serriola, Onopordum acanthium, Potentilla recta, Dipsacus fullonum ssp. sylvestis, Sisymbrium altissimum, Vicia villosa

Records: Washington Natural Heritage Program PDFAB0F0V0\*007; PDFAB0F7M0\*010

Additional sources of information: Site visit Aug. 3, 1998, landowner personal communication

Comments: Steppe: Section 12--Shrubs: Artemisia dracunculus, Chrysothamnus nauseosus, Crataegus douglasii, Holodiscus discolor, Philadelphus lewisii, Prunus sp., Rosa nutkana woodsii, Sambucus cerulea, Symphoricarpos albus; Perennial graminoids: Agropyron spicatum, Poa pratensis; Perennial forbs: Achillea millefolium, Apocynum cannabinum, Clematis sp. Eriophyllum lanatum, Heuchera cylindrica, Convolvulus arvensis, Cynoglossum officinale, Hypericum perforatum, Lupinus sp., Potentilla recta, Rumex crispus, Solidago missouriensis; Annuals and biennials: Amsinckia sp., Anthriscus caucalis, Bromus japonicus, Bromus sp., Bromus tectorum, Chenopodium album, Cichorum intybus, Conyza canadensis, Dipsacus fullonum spp. sylvestris, Elymus caput-medusae, Epilobium brachycarpum, Festuca megalura, Lactuca serriola, Onopordum acanthium, Sisymbrium altissimum, Tragopogon dubius, Vicia villosa. Section 1, Steppe--Shrubs: Eriogonum niveum; Perennial graminoids: Agropyron cristatum, Agropyron spicatum, Poa secunda; Perennial forbs: Achillea millefolium, Cichorium intybus, Convolvulus arvensis, Gaillardia aristata, Helianthus annuus, Hypericum perforatum, Lomatium sp., Lupinus sp., Rumex crispus; Annuals and biennials: Alyssum alyssoides, Amaranthus albus, Amsinckia sp., Bromus brizaeformis,

Bromus japonicus, Bromus mollis, Bromus tectorum, Conyza canadensis, Elymus caput-medusae, Epilobium brachycarpum, Euphorbia glyptosperma, Festuca microstachys, Lactuca serriola, Madia gracilis, Poa bulbosa, Polygonum douglasii var. douglasii, Sisymbrium altissimum, Tragopogon sp., Vicia villosa. Riparian: Trees and shrubs: Acer negundo, Almus sp., Cornus stolonifera, Juglans nigra, J. regia, Juniperus sp., Parthenocissus quinquefolia, Philadelphus lewisii, Populus trichocarpa, Prunus sp. (cultivar), Rhus glabra, Robinia pseudo-acacia, Rosa sp., Rubus discolor; Perennial graminoids: Dactylis glomerata, Phalaris arundinacea, Phleum pratense, Perennial forbs: Ambrosia sp., Arctium minus, Bryonia alba, Cirsium arvense, Epilobium sp., Melissa officinalis, Nepeta cataria, Rorippa nasturtium-aquaticum, Rumex crispus, Solanum sp., Urtica dioica, Veronica sp.; Annuals and biennials: Bromus tectorum, Cirsium vulgare, Cynoglossum officinale, Dipsacus fullonum spp. sylvestris, Lactuca serriola, Lunaria annua, Polypogon monspeliensis.

See Table 11C for reconnaissance plot data.

Site ranking: Rated as poor, due to the large number and extensive coverage of exotic taxa.

Site name: Spaulding Road

County and state: Whitman County, Washington

Location: T15N, R42E, Section 35: SE 1/4 of SE 1/4

Elevation: 1,880-1,960'

Ownership: Private

Communities present: Festuca idahoensis/Symphoricarpos albus, Crataegus douglasii/Symphoricarpos albus

Rare or endemic taxa: Haplopappus liatriformis (over 80 plants seen Aug. 4, 1998), Silene spaldingii (5 plants seen on Aug. 4, 1998), Aster jessicae? (J. Arnett site record 1990: "There is some question about the identification of these plants-putative hybrids with Aster occidentalis have previously been reported here.")

Exotic species concerns: Annual bromes, Agrostis interrupta, Anthriscus caucalis, Arrhenatherum elatius, Bryonia alba, Cirsium vulgare, Convolvulus arvensis, Hypericum perforatum, Lactuca serriola, Poa pratensis, Sisymbrium altissimum, Verbascum thapsus

Records: Washington Natural Heritage Program PDASTDT0C0\*012, PDCAR0U1S0\*010, PDAST0T1M0\*10

Additional sources of information: Site visit Aug. 4, 1998

Comments: Coverage of Anthriscus caucalis is approximately 50% in the Festuca idahoensis/Symphoricarpos albus community. This site was recommended for protection by Lorain (1991a).

See Table 11D for reconnaissance plot data.

Site ranking: Fair to poor. This site is small and exotics are extensive, but it does contain two (or three) rare taxa and some stands in which native shrubs, grasses, and forbs are well represented.

Site name: Knotgrass Road

County and state: Asotin County, Washington

Location: T11N, R44E, Section 29: SE 1/4 of SW 1/4

Elevation: 2,200-2,320'

Ownership: Bureau of Land Management

Communities present: Agropyron spicatum-Poa secuda, Artemisia rigida-Poa secunda

Rare or endemic taxa: None

Exotic species concerns: Annual bromes, Centaurea solstitialis, Hypericum perforatum,

Lactuca serriola, Sisymbrium altissimum, Verbascum blattaria

Records: None

Additional sources of information: Site visit Aug. 14, 1998

Comments: See Table 11E for reconnaissance plot data.

Site ranking: Poor, due to high degree of invasion by annual bromes.

Site name: Reubens Cemetery

County and state: Lewis County, Idaho

Location: T34N, R2W, Section 11: SE 1/4 of SE 1/4

Elevation: 3,640'

Ownership: Roman Catholic Diocese, Pine City Cemetery

Communities present: Early seral stage of Pinus regeneration in *Pinus ponderosal* Symphoricarpos albus association

Rare or endemic taxa: Aster jessicae, Lomatium dissectum var. dissectum. Haplopappus liatriformis has been reported at this site (Lorain 1991c) but was not observed in 1998.

Exotic species concerns: Cirsium arvensis, C. vulgare, Dactylis glomerata, Hypericum perforatum, Phleum pratensis, Poa pratensis, Verbascum thapsus

Records: Idaho Conservation Data Center PDAST0T1M0\*018, PDASTDT0C0\*25

Additional sources of information: Lichthardt 1997, Lorain 1991a,b,c; site visit Aug. 15, 1998.

Comments: Trees and shrubs: Amelanchier alnifolia, Pinus ponderosa (mostly 2-4 m tall), Rosa nutkana woodsii, Symphoricarpos albus; Perennial graminoids: Agropyron spicatum, Bromus carinatus, Bromus inermis, Carex sp., Dactylis glomerata, Elymus glaucus, Festuca idahoensis, Koeleria cristata, Poa pratensis, Phleum pratense; Perennial forbs: Achillea millefolium, Aster jessicae, Astragalus arrectus, Cirsium arvense, Dianthus deltoides, Fragaria virginiana Galium boreale, Geranium viscosissimum, Geum triflorum, Haplopappus carthamoides, Hypericum perforatum, Iris missouriensis, Lomatium dissectum var. dissectum, Lithospermum ruderale, Lupinus sericeus, Perideridia gairdneri, Penstemon sp., Plantago lanceolata, Potentilla arguta, Potentilla gracilis, Rumex acetosella, Sidalcea oregana, Silene scouleri, Solidago missouriensis, Veratrum californicum, Wyethia amplexicaulis, Annuals and biennials: Cirsium vulgare, Epilobium brachycarpum, Lactuca serriola, Tragopogon dubius, Verbascum thapsus.

Site ranking: Fair. This site is very small and but invasive exotics are not extensive except for a large population of *Cirsium arvense* at the west end, and at least two rare taxa are present.

Site name: Chief Joseph Wildlife Area

County and state: Asotin, Washington

Location: T7N, R46E, Section 36: E1/2

Elevation: 2,200-2,520'

Ownership: Department of Natural Resources (administered by Washington Department

of Fish and Wildlife)

Communities present: Primarily Agropyron spicatum-Festuca idahoensis (Daubenmire 1970), with Symphoricarpos albus thickets (Tisdale 1986) and Agropyron-spicatum-Poa secunda lithosol

Rare or endemic taxa. None

Exotic species concerns: Poa pratensis, Centaurea solstitialis, Bromus tectorum and other annual bromes, Hypericum perforatum, Lactuca serriola

Records: None

Additional sources of information: Site visit, Aug. 17, 1998

Comments: This area is grazed. See Table 11F for reconnaissance plot data.

Site ranking: Although some parts of this site have substantial coverage of exotic taxa, some areas are in good condition. On this basis and the fact that the area is of state land is quite large, this site was rated as fair to good.